

ABSTRACT

Ablation devices and associated methods are provided for use in palliative treatment of a bone tumor on or in a compact bone region. The bone treatment devices include an elongate probe having a distal end. A proximal end of the probe supports placement in a location at or adjacent to the bone tumor. Electrodes are carried within the probe for deployment from the distal end into the bone tumor. The electrodes may be shapable to create, upon deployment, an array of electrodes that defines a geometric area within the bone tumor. Application of energy, for example energy from a radio frequency (RF) source, to the area of the bone tumor via the electrodes destroys at least a portion of the nerve receptors located in or adjacent to the tumor and produces a reduction in pain associated with the bone tumor. Liquid, such as a polymer in liquid form, may be injected through an electrode needle, with electrode heating being employed to allow introduction of the polymer solution through the needle and/or hardening at the site of injection.